

AutDB Information									$Pten^{m3m4/m3m4}$ (6-weeks)		$Pten^{m3m4/m3m4}$ (2-weeks)	
Human Gene	Name	Alteration in ASD	Del.	Miss.	Non.	SNPs	Other	Primary Reference	Fold Change	q-value	Fold Change	q-value
ADCY5	Adenylate cyclase 5	Rare Single Gene variant	x	x				O'Roak BJ, <i>Nature</i> , 2012	-0.3654	0.01572		
AGMO	alkylglycerol monooxygenase	Genetic Association	x	x				Sebat J, <i>Science</i> , 2007	0.5013	0.04203		
AHI1	Abelson helper integration site 1	Rare Single Gene variant	x	x	x	x		Alvarez Retuerto AI, <i>Hum Mol Genet</i> , 2008	-0.6483	0.00136		
ARHGAP15	Rho GTPase activating protein 15	Rare Single Gene variant	x		x		x	O'Roak BJ, <i>Nat Genet</i> , 2011	-0.5287	0.00347		
CADPS2	Ca2+-dependent activator protein for secretion 2	Rare Single Gene variant	x	x			x	Cisternas FA, <i>Genomics</i> , 2003	-0.3246	0.04863		
CELF6	CUGBP, Elav-like family member 6	Genetic association/Rare single gene variant/Functional	x					Dougherty JD, <i>J Neurosci</i> , 2013	-0.4651	0.02542		
CHD2	Chromodomain helicase DNA binding protein 2	Multigenic CNV	x	x	x		x	Carvill GL, <i>Nat Genet</i> , 2013	-0.3741	0.03897		
CHRNB3	Cholinergic receptor, nicotinic, beta 3 (neuronal)	Rare single gene variant	x				x	Prasad A, <i>G3 (Bethesda)</i> , 2012	-0.9624	0.04638		
CNTN5	Contactin 5	Rare single gene variant	x	x			x	van Dallen E, <i>Neurogenetics</i> , 2011	-0.5329	0.00136		
CNTNAP2	contactin associated protein-like 2	Syndromic	x	x	x	x	x	Arking DE, <i>Am J Hum Genet</i> , 2008	-0.3408	0.03711		
CREBBP	CREB binding protein	Syndromic	x	x	x	x	x	Barnby G, <i>Am J Hum Genet</i> , 2005	-0.324	0.0499		
CTTNBP2	cortactin binding protein 2	Rare Single Gene variant	x	x			x	Cheung J, <i>Genomics</i> , 2001	-0.4045	0.00531		
DHCR7	7-dehydrocholesterol reductase	Syndromic	x	x	x		x	Tierney E, <i>Am J Med Genet</i> , 2001	0.8177	0.00136		
DMD	dystrophin (muscular dystrophy, Duchenne and Becker types)	Genetic Association	x	x		x	x	Wu JY, <i>J Child Neurol</i> , 2005	-0.3719	0.01144		
DOCK10	Dedicator of cytokinesis 10	Rare single gene variant	x	x				Nava C, <i>Eur J Hum Genet</i> , 2014	0.529	0.00136	0.5373	0.00686
FOXP1	Forkhead box G1	Syndromic	x	x	x		x	Kortüm F, <i>J Med Genet</i> , 2011	-0.4098	0.03083		
FOXP1	forkhead box P1	Rare Single Gene variant	x	x	x	x		O'Roak BJ, <i>Nat Genet</i> , 2011	-0.3906	0.00706		
FOXP2	forkhead box P2	Rare single gene variant	x	x	x	x	x	Gong X, <i>Am J Med Genet B Neuropsychiatr Genet</i> , 2004	-1.0191	0.00136	-0.4315	0.03566
GALNT13	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 13 (GalNAc-T13)	Rare Single Gene variant	x					Bucan M, <i>PLoS Genet</i> , 2009	-0.4285	0.00444		
GPR37	G protein-coupled receptor 37 (endothelin receptor type B-like)	Rare single gene variant	x	x		x	x	Fujita-Jimbo E, <i>PLoS One</i> , 2012	0.5242	0.00136		
GRIK2	glutamate receptor, ionotropic, kainate 2	Genetic Association	x	x		x	x	Jamain S, <i>Mol Psychiatry</i> , 2002	-0.5314	0.00136		
HEPACAM	hepatic and glial cell adhesion molecule	Rare Single Gene variant	x	x	x			López-Hernández T, <i>Am J Hum Genet</i> , 2011	0.4332	0.00621		

IL1RAPL1	interleukin 1 receptor accessory protein-like 1	Rare single gene variant	x	x			x	Bhat SS, <i>Clin Genet</i> , 2008	-0.4019	0.012		
KANK1	KN motif and ankyrin repeat domains 1	Rare single gene variant	x	x			x	Vanzo RJ, <i>Eur J Med Genet</i> , 2013	0.586	0.00136		
LAMC3	laminin, gamma 3	Rare Single Gene variant	x	x	x		x	O'Roak BJ, <i>Nat Genet</i> , 2011	0.6	0.00706		
NELL1	NEL-like 1 (chicken)	Genetic association	x			x		Connolly JJ, <i>Child Dev</i> , 2013	-0.3861	0.00782		
PCDH15	Protocadherin-related 15	Genetic association	x			x		Anney R, <i>Hum Mol Genet</i> , 2012	0.6366	0.00136		
PTCHD1	patched domain containing 1	Rare Single Gene variant	x	x				Marshall CR, <i>Am J Hum Genet</i> , 2008	-0.3496	0.04924		
SLC16A3	solute carrier family 16, member 3 (monocarboxylic acid transporter 4)	Rare Single Gene variant	x				x	Pinto D, <i>Nature</i> , 2010	0.9118	0.00621		
SYN2	Synapsin II	Genetic association	x	x				Fassio A, <i>Hum Mol Genet</i> , 2011	0.4011	0.01572		
ADORA2A	adenosine A2a receptor	Syndromic				x		Freitag CM, <i>Eur Child Adolesc Psychiatry</i> , 2010	-1.3121	0.00136		
ARNT2	aryl-hydrocarbon receptor nuclear translocator 2	Syndromic		x		x	x	Chakrabarti B, <i>Autism Res</i> , 2009	-0.5197	0.00136		
CD44	CD44 molecule (Indian blood group)	Genetic Association					x	Hu VW, <i>BMC Genomics</i> , 2006	0.7537	0.00247		
CDH9	cadherin 9, type 2 (T1-cadherin)	Genetic Association				x		Wang K, <i>Nature</i> , 2009	-0.5571	0.00136		
CNTNAP3	contactin associated protein-like 3	Rare Single Gene variant		x				Vaags AK, <i>Am J Hum Genet</i> , 2012	-1.0654	0.00136		
DCX	doublecortex, lissencephaly, X-linked (doublecortin)	Rare Single Gene variant		x	x		x	Vourc'h P, <i>Am J Med Genet</i> , 2002	-0.5902	0.00136		
DLX1	distal-less homeobox 1	Genetic Association				x		Liu X, <i>Eur J Hum Genet</i> , 2009	-0.7585	0.01572		
DRD2	Dopamine receptor D2	Rare single gene variant		x		x		Hettinger JA, <i>Behav Brain Funct</i> , 2012	-2.6216	0.00136		
EGR2	early growth response 2 (Krox-20 homolog, Drosophila)	Genetic Association				x		Hu VW, <i>BMC Genomics</i> , 2006	-0.8403	0.00136		
F13A1	coagulation factor XIII, A1 polypeptide	Genetic Association					x	Hu VW, <i>BMC Genomics</i> , 2006	0.848	0.00247		
FABP5	fatty acid binding protein 5 (psoriasis-associated)	Rare Single Gene variant, Genetic Association		x			x	Maekawa M, <i>J Hum Genet</i> , 2010	0.4024	0.02893		
FABP7	fatty acid binding protein 7, brain	Genetic Association		x		x	x	Maekawa M, <i>J Hum Genet</i> , 2010	1.0106	0.00136		
FLT1	fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor)	Genetic Association					x		0.3697	0.02651		
FRMPD4	FERM and PDZ domain containing 4	Rare Single Gene variant		x				Hu VW, <i>BMC Genomics</i> , 2006				
GLO1	glyoxalase I	Genetic Association				x		Piton A, <i>Mol Psychiatry</i> , 2011	-0.3411	0.02491		
GLRA2	glycine receptor, alpha 2	Rare Single Gene variant		x				Junaid MA, <i>Am J Med Genet A</i> , 2004	0.8257	0.00136	-0.4801	0.01905
GSN	Gelsolin	Rare single gene variant					x	Piton A, <i>Mol Psychiatry</i> , 2011	-0.6646	0.00136		
								Awadalla P, <i>Am J Hum Genet</i> , 2010	1.2159	0.00136	0.9807	0.00374

HS3ST5	heparan sulfate (glucosamine) 3-O-sulfotransferase 5	Genetic Association			x		Wang K, <i>Nature</i> , 2009	-0.5679	0.0197			
HTR1B	5-hydroxytryptamine (serotonin) receptor 1B	Genetic Association		x	x		Orabona GM, <i>Brain Res</i> , 2009	-0.8468	0.03487			
KCND2	Potassium voltage-gated channel, Shal-related subfamily, member 2	Rare single gene variant	x		x	x	Connolly JJ, <i>Child Dev</i> , 2013	-0.3887	0.00782			
KCNJ10	Potassium inwardly-rectifying channel, subfamily J, member 10	Genetic Association	x		x		Sicca F, <i>Neurobiol Gis</i> , 2011	0.5056	0.00136	0.5438	0.00374	
MSN	Moesin	Functional				ncRNA	Kerin T, <i>Sci Transl Med</i> , 2012	0.6059	0.00136	0.487	0.04256	
NBEA	neurobeachin	Rare single gene variant				x	Castermans D, <i>J Med Genet</i> , 2003	-0.3281	0.0475			
NEFL	Neurofilament, light polypeptide	Genetic association/functional			x		Anitha A, <i>Mol Autism</i> , 2012	0.62	0.00136			
PER1	period homolog 1 (<i>Drosophila</i>)	Genetic Association	x		x		Nicholas B, <i>Mol Psychiatry</i> , 2007	-0.6362	0.00136			
PIK3CG	phosphoinositide-3-kinase, catalytic, gamma polypeptide	Genetic Association			x		Serajee FJ, <i>J Med Genet</i> , 2003	0.687	0.02142			
PTGS2	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	Genetic Association				x		Yoo HJ, <i>Neurosci Res</i> , 2008	0.7714	0.00136		
REEP3	receptor accessory protein 3	Rare single gene variant				x	Castermans D, <i>Eur J Hum Genet</i> , 2007	0.5473	0.00136			
RELN	Reelin	Genetic Association	x	x	x	x	Persico AM, <i>Mol Psychiatry</i> , 2001	-0.4139	0.00706			
SERPINE1	Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1	Genetic association			x		Campbell DB, <i>Autism Res</i> , 2008	1.0912	0.012			
SYT17	synaptotagmin XVII	Genetic Association			x		Wang K, <i>Nature</i> , 2009	-0.4297	0.02893			
TH	tyrosine hydroxylase	Genetic Association				no assoc.	Comings DE, <i>Biol Psychiatry</i> , 1995	-2.3039	0.00136			